

CHARTS
FLOW PLANS

PAINT NUMBERED
TREES

PERMANENT
SAMPLES

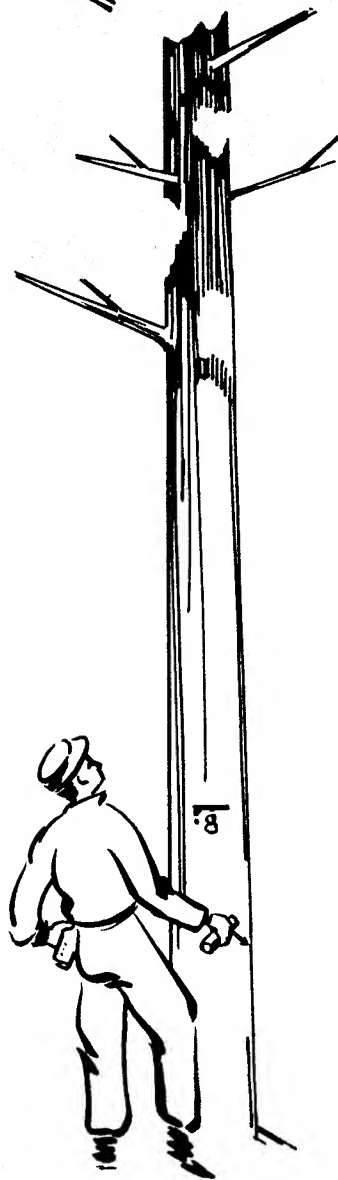
UNIT
RECORDS

TIMBER
BOOKKEEPING

THE DIAMETER
TAPE

TRIAL
BALANCE

PORT-A-
PUNCH



FOREST CONTROL

by

CONTINUOUS INVENTORY

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In 84
140

"Today I have grown taller from walking
with the trees."

...Karle Wilson

Milwaukee, Wis. November, 1965 No. 140

THE ABIDING VALUE OF CLASSICAL CULTURE

No matter what your views may be as to the practical value of the classics in our language, literature, learned professions or statecraft, that higher value to the spirit of civilized man in every age and every land admits of no argument. It has been a force in human longings and achievements on which all civilized men agree.

Robert S. Birch
October, 1935

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NOV 1965



ORGANIZATION CHANGES

Over the next few months a number of administrative changes will be made in the Forest Service organization in the East. Regional field offices will be established for State and Private Forestry. S&PF programs now run by Regional Office in Milwaukee, Upper Darby, and Atlanta will be separated from National Forest Administration and established in two Regional Field Offices. Two Administrators for S&PF with Regional Forester status, will direct the new groups - one headquartered in Atlanta and the other at Upper Darby, Pa.

SMITH TRANSFERS OUT OF THE BRANCH DECEMBER 5

We received notice last week that Dick Smith will be permanently assigned to Personnel Management next month. He will do his best to complete current cooperative data processing cases before transferring. Forest Service responsibility in this field is acknowledged and after this date Smith will be released for limited periods of time to give assistance where needed.

STOTT GOES BACK TO THE WOODS

January 1, 1966 is the beginning of retirement for Stott. His post-retirement plans are ambitious. They include a three-way cooperation in CFI control work, plant collection and silvical research. Part of this program will involve consulting in the north central region on a modest scale, with emphasis on woods work.

Stott's headquarters for field activities will be at the Ford Forestry Center, L'Anse, Michigan - his office headquarters will be George Banzhaf and Company, 622 No. Water Street, Milwaukee, 53202. Mail should be addressed to Stott's home at 2625 No. 59th Street, Milwaukee, Wisconsin, 53210 - Telephone 414-873-8461.

CFI will continue to be the central core of retirement activities and responsibilities for a hopefully long number of years ahead. An action plan for the year 1966 will be submitted with the December CFI letter.

BILL BARTON TO TAKE OVER CFI AND THE LARGE OWNERSHIP MANAGEMENT BRANCH

A week of inter-regional CFI conference has just been completed in Milwaukee. Barton, Smith and Stott have come to a pretty good understanding of the course of cooperative inventory and forest management for the years ahead. There has been a reasonably clear cut division of effort. Bill Barton will take over much of the data processing assistance for active cases, and Stott will work to a great extent on the field end of the jobs. New cases, of which there are 3 or 4 to be remeasured in 1966, will be given assistance on request. Barton's address is United States Forest Service, 6816 Market Street, Upper Darby, Pennsylvania, 19082 - Telephone, 215-3525800.

CFI IN REGION 9 HAS HAD A WIDELY ACKNOWLEDGED BENEFICIAL
EFFECT ON FOREST MANAGEMENT PRACTICE AND SILVICULTURAL THERAPY

CONTINUOUS FOREST CAPITAL INVENTORY AND OWENS-ILLINOIS

A personal call last week from Marlowe Burgy and Larry Zernach of Tomahawk, Wisconsin, was most timely and newsworthy. The Company has prepared a fine plan of action from the CFI results over 6 years. I have often thought that the benefits which industrial foresters take from the CFI system depend more on the managerial perspicacity of Company officials than any other single factor. This qualification has been outstanding with Owens-Illinois. I have enjoyed working with the Company these past 20 years, and hope retirement will not end our pleasant cooperation.

A FEW HIGHLIGHTS OF CFI AT OWENS-ILLINOIS

by

COMPANY FORESTER LARRY ZERNACH, TOMAHAWK, WISCONSIN

Owens-Illinois is presently reaping its fullest benefits from CFI in the analysis of Company forests and the determination of present and projected cutting budgets. The Company completed remeasurements in 1964, giving them 3 sets of data to analyze and to project. Results of the third measurement have had a great effect on the determination of the future cutting budget for each major species. For two of the most important species groups, aspen and the northern hardwoods, the effects of the inventory on the cutting budget are explained in brief.

Aspen, The Trouble Maker

Aspen is a problem species in the Lake States to almost every forest manager, and especially to Owens-Illinois Company tract managers. The third CFI measurement illustrates this problem. It shows the tremendous growth decrease resulting from the combination of all positive and negative growth components. Mortality had a drastic increase while ingrowth and accretion or survivor growth decreased. Height and DBH changes for the second growth period decreased 36% and 15% respectively. The average stand age was shown to be 35 years, and three-fourths of the aspen types are in the 35 to 40-year age class. It was also apparent that during the last remeasurement period a dramatic decline in tree vigor occurred. Nearly 50% of the volume is now in the high risk and slow growth category; an increase from 35% in 1958.

This information on aspen indicated the need to liquidate much of the present volume. A 10-year liquidation period was established to accomplish this, and the length of the period was decided by the projection of volume losses due to mortality and the spread of decay. The quantity of wood which could be used and economically manufactured by the Company mill was also a deciding factor.

This rate of liquidation will help to keep Owens-Illinois forest in a high state of productivity. It will convert over-mature aspen into vigorous stands of well-stocked reproduction, and utilize old timber before it dies. The Company's stand description program will establish the priority of removal of this timber during the next 10 years.

Northern Hardwood Timber Growing Well

Northern hardwood stands are in some contrast to those of aspen. Growth is good but has remained much the same during the two measurement periods. This was surprising since the growth of most surviving trees decreased in both height and diameter. However, ingrowth trees more than counter-balanced this loss. Many 5 inch trees grew into the stand in the two 3-year measurement intervals.

Because of this constancy in overall growth, and low mortality losses, only moderate increases in allowable cut have been established. However, projected forward, these changes in 15 or 20 years promise to double the current cut and make up for later aspen deficiencies.

The good growth of released trees in thinnings and improvement cuttings is quite noticeable. This has lent encouragement to intermediate cuts on the better sites of hardwood pole stands where an economic commercial volume can be harvested.

WE SHARE THE BLAME FOR THIS DELAY

Robert Schmeling, Forester for the Mead Corporation, has sent us a report on the automatic data processing for the Company's CFI. It is two years late now, and the date of completion has not yet quite been reached. However, cooperation on the remaining data processing will continue after reorganization, with help from our new work center in the East.

EVERY FORESTRY ORGANIZATION, IN THESE DAYS OF MODERN MACHINE DATA MANIPULATION, REQUIRES A WELL-TRAINED COLLABORATOR TO WORK BETWEEN THE WOODS AND THE MACHINE. IT IS UNWISE TO LEAN TOO HEAVILY UPON COOPERATORS FOR THIS SERVICE.

CANE POLES ARE STILL PROVING THEIR WORTH IN CFI

Childre and Saunders, Inc., P. O. Box 535, Foley, Alabama, 36535, handle fine cane poles 24 feet long. Cut back to 20 feet and mounted with U-gauges, these poles are most satisfactory for measuring the trees of moderate length found in the north central region. One lot of 25 poles has been delivered to Indiana for approximately \$20.00.

NORTHWEST PAPER COMPANY REPORTS ON CFI

Almost finished by deer season November 15, is the jubilant report of Ed Jankowski, Chief Forester for the Northwest Paper Company at Cloquet, Minnesota. Work started on CFI by Rudy Kajander, Chief of Party, in early July. The seventh-acre plots were established 5 years ago. There were

752 plots to remeasure and 141 to set out on lands acquired during the 5-year period, and 214,457 acres were cruised. Forester Jankowski's brief comments on the job are much to the point.

CFI plots are remeasured more rapidly than they are established. All paint numbers have withstood the weather well for 5 years. This has been the "wettest damn summer" on record with only one rainless day in September. The U-gauge calipers for top diameters are a great improvement over the old forest survey bar calipers. Length measurements have improved. Programmed error checks for tree detail data, applied bi-weekly during the course of the project, have been most helpful. Data processing will begin early in 1966 with assistance if needed from Bill Barton in the Pennsylvania office of State and Private Forestry, and Stott.

INDIANA STATE FOREST PROJECT GETTING UP STEAM

Indiana State is on the second year of a 3-year CFI project. Unlike most cases this one will continue throughout the mild Indiana winter and be completed April 1, 1966. Work on this year's 28,500 acre area has just barely begun with a crew of 4 men. The plots are fifth-acre in size and average about 25 trees over 5 inches in diameter breast high. Tree detail error checks have been programmed and are run every few weeks to check each crew. These checks have been most helpful. Field checks and added training for the new men are planned by Cal Stott for the first week in December.

BUREAU OF INDIAN AFFAIRS BUSY ON CFI

We have seen a great deal of Charles Bullard of the U.S.B.I.A. this past year, it is pleasing to report, for his visits mean progress on the computation of CFI data. Smith and Bullard are busy on machine work these days and more than 2,000 fifth-acre plots are in various stages of completion and compilation. It is interesting to note that the error check program brought to light mistakes in 3% to 8% of the IBM cards. This varied very much in number of errors within the 3 or 4 separate Minnesota and Wisconsin projects.

MUSKINGUM WATERSHED CONSERVANCY DISTRICT, NEW PHILADELPHIA, OHIO

Another winter project was begun a month ago by Bill Lebold in southeastern Ohio. Jerry Branam, recently of this office, is giving capable assistance on plots. Two crews are at work on the remeasurement of more than 400 fifth-acre sample plots in the Muskingum area. Hardwood timber stands selectively cut through the years are showing excellent growth and pine plantations with a dozen commercial trees 10 years ago today support 50 to 100 trees.

Sort checks and woods checks will be made on this project by Bill Lebold and Stott early in December, after which the greatest problem will be to complete the work before growth starts in April, 1966.

CFI ON THE PUBLIC LANDS OF GOGEBIC COUNTY

Lloyd Leppanen, County Forester for Gogebic County has completed his 286 plot project near Ironwood, Michigan. It took rubberized suits to make the work bearable. Late summer rains have been heavy in northern Michigan. It is reported that the men took 2 plots per crew-day, and that the remeasured fifth-acre samples averaged 35 trees over 5 inches per plot. Relocating the starting points was troublesome, for some of them were inadequately marked on the roadsides. Programmed checks for the plot work were most helpful and the work improved noticeably as it progressed as a result of the repeated checks.

THE STANDARD PROGRAM AT THE FORD FORESTRY CENTER

A wealth of work related to woods research goes on at all times at the Ford Forestry Center, L'Anse, Michigan. Among other projects, Jim Meteer is now busy with the standardization of CFI programming, and the preparation of the CFI school papers for publication. Field contacts with industrial companies are planned for December by Meteer and Stott.